

NAME: \_\_\_\_\_

date: \_\_\_\_\_



### Chlorophyll A- Response Sheet

*You are a member of an International Team of Marine Biologists. You are tasked with predicting and monitoring possible harmful algae blooms. Using the data maps and guiding questions, complete this challenge.*

1. Open MyNASADData.  
<http://mynasadata.larc.nasa.gov/>
2. Click on +Data Access
3. Click on +Live Access Server (Advanced Edition)
4. Under Select Data Set, click on Oceans
5. Under Dataset Variable(s), select Monthly Chlorophyll-a Concentration (SeaWiFS)
6. Click on the red Next button
7. Check that the following options are selected:
  - View: Longitude-Latitude map (xy)
  - Output: Interactive color plot
  - Region: Full Region
  - Time: September 1997
8. Click the red Next. A map should appear.
9. Click on "Open plot in a new window"
10. Follow steps 1-9 again, but change the time to September 2007
11. A second map should appear.
12. Repeat steps 1-10 for September 2001 and 2005.
13. You should have a total of 4 open maps.

Take a few moments to the graphic sources.

*List 3 observations of change you can make based on these two maps. Be sure to use complete sentences and scientific language.*

*Now the time has come to choose sites for monitoring. The problem is, your department has had major budget cuts. You are only allowed to choose one site to monitor and investigate further for potential harmful algae blooms. Using your knowledge and data, choose a site and justify your choice. You need to describe your site, and reasons for choosing it over all other choices. Keep in mind, you must accurately describe your site using geographical, cardinal, and longitudinal and latitudinal directions. You do not want your team to show up in the wrong area.*

**Extensions:**

Zoom in on your chosen site.

*Look closely now, at the zoomed area. What areas have remained similar to 1997?*

*Using longitude and latitude, what area has changed most? How do you know?*